

WATER QUALITY EQUIVALENCY CREDIT TRADING FRAMEWORK



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San Diego County
Regional Airport Authority
PO BOX 82776
San Diego, CA 92138
619-400-2400
www.san.org



SAN DIEGO
INTERNATIONAL AIRPORT™

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BACK OF COVER

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Acronyms

?: percent

ACP: Alternative Compliance Project

ACWA: Association of Clean Water Administrators

a.k.a.: also known as

Authority: San Diego County Regional Airport Authority

BMP: best management practice

BMPDM: Best Management Practice Design Manual

CFR: Code of Federal Regulations

CWA: Clean Water Act

DCV: design capture volume

Focused Priority Condition: Focused Priority Water Quality Condition as listed in the WQIP

HMP: Hydromodification Management Plan

HU: Hydrologic Unit

Industrial Permit: General Permit for Stormwater Discharges Associated with Industrial Activities, Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001

MEP: maximum extent practicable

MS4: Municipal Separate Storm Sewer System

MSGP: 2008 USEPA NPDES Multi-Sector General Permit

Municipal Permit: Waste Discharge Requirements for Discharges of Urban Runoff from the MS4s Draining the Watersheds Within the San Diego Region, NPDES No. CAS0109266, as modified by Order Nos. 2015-0001 and 2015-0100

NPDES: National Pollutant Discharge Elimination System

O& M: Operation and Maintenance

P&EAD: Planning & Environmental Affairs Department

PDP: Priority Development Project

Port of San Diego: San Diego Unified Port District

RP: Responsible Party

RWQCB: California Regional Water Quality Control Board, San Diego Region

SAN: San Diego International Airport

State Water Board: State Water Resources Control Board

SWMP: Stormwater Management Plan

SWPPP: Stormwater Pollution Prevention Plan

SWQMP: Stormwater Quality Management Plan

U.S.C.: United States Code

USEPA: United States Environmental Protection Agency

WMA: Watershed Management Area

WMAA: Watershed Management Area Analysis

WQE: Water Quality Equivalency

WQIP: Water Quality Improvement Plan

1 Introduction

The purpose of this document is to provide a framework for implementing water quality credit trading at the San Diego International Airport (SAN). Water quality credits calculated per the 2015 Water Quality Equivalency (WQE) Guidance Document for Region 9¹ (2018 Phase 2 Draft pending California Regional Water Quality Control Board, San Diego Region [RWQCB] approval) can be used to partially or wholly satisfy pollutant control requirements for a proposed Priority Development Project (PDP) through an Alternative Compliance Project (ACP) that achieves “greater overall water quality benefit.” This framework relies on the WQE Guidance Document as a basis for outlining the methods that project applicants, and the San Diego County Regional Airport Authority (Authority), can use to bank, track, and trade water quality credits for development projects within the SAN jurisdiction. Guidance on the policies developed specifically for SAN is provided in the following sections. The relationship between this framework and other documents and permits is presented in Figure 1.1.

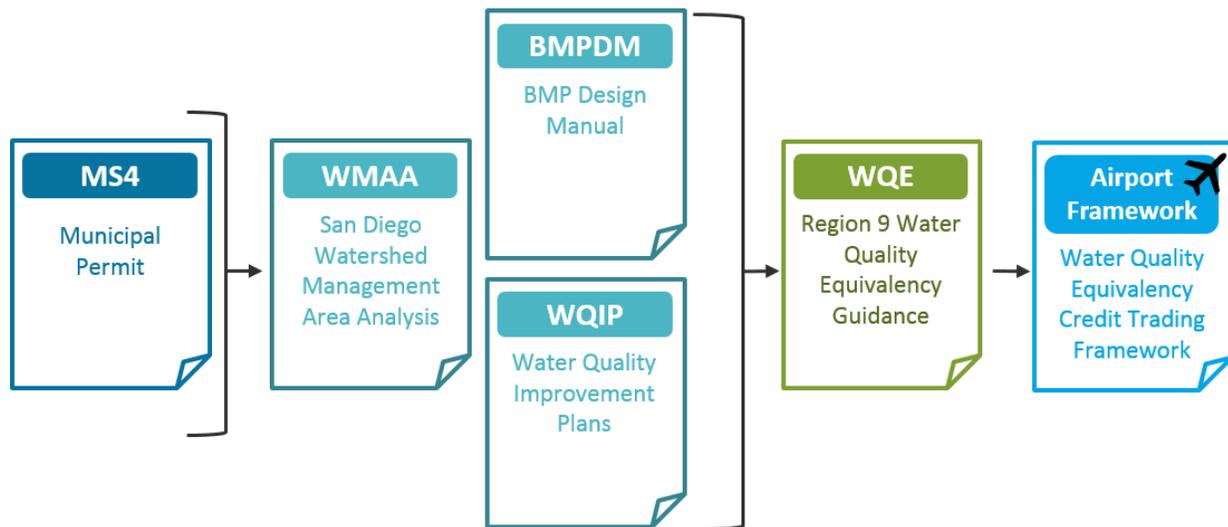


Figure 1.1. Relationship Between This Framework and Other Relevant Documents

1.1 Regulatory Framework

1.1.1 National Policy

The Clean Water Act (CWA) was enacted in 1972 to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.”² The CWA provides authority for the United States Environmental Protection Agency (USEPA), states, and tribes to develop pollution prevention programs and activities. The 2003 USEPA Water Quality Trading Policy outlines trading objectives for states, interstate agencies, and tribes that support the implementation of

¹ [WQE Guidance Document Region 9 December 2015](#)

² [Federal Water Pollution Control Act](#) (Public Law 92-500, as amended), 33 United States Code (U.S.C.) Sec. 1251, et seq.

water quality trading that provides greater flexibility and reduces overall compliance costs to improve water quality.

1.1.2 Regional Regulatory Instruments

The Authority was created by state legislation to operate SAN and to lead the regional strategic air transportation planning effort. As of January 1, 2003, the Authority became the new owner and operator of SAN, a role previously held by the San Diego Unified Port District (Port of San Diego).

The Authority is subject to the requirements of two National Pollutant Discharge Elimination System (NPDES) stormwater permits:

- San Diego Region Municipal Permit, NPDES Order No. CAS0109266, as modified by Order Nos. 2015-0001 and 2015-0100
- State Water Resources Control Board (State Water Board) General Permit for Stormwater Discharges Associated with Industrial Activities (Industrial Permit), Water Quality Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001

1.2 Municipal Permit: San Diego Bay Water Quality Improvement Plan

The Authority is subject to the Municipal Permit because it operates a Municipal Separate Storm Sewer System (MS4). Water quality impairment due to copper and zinc concentrations in wet weather discharges from SAN has been identified as a Focused Priority Water Quality Condition (Focused Priority Condition) in the San Diego Bay Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP), required under the Municipal Permit, and applies to the Pueblo Hydrologic Unit (HU) of the WMA, where SAN is located. The geographic extent of the Focused Priority Condition is in the jurisdictional area of the Authority, and the Authority is the sole Responsible Party (RP) for the condition. Identification of copper and zinc concentrations in wet weather discharges as a Focused Priority Condition is based on a history of sampling results that exceeded the 2008 USEPA NPDES Multi-Sector General Permit (MSGP) benchmark values. To address these conditions and schedules, the Authority has set numeric goals and strategies for implementation in the WQIP³.

The Municipal Permit also requires the Authority, together with other RPs, to submit an annual report (WQIP Annual Report) to communicate the status and progress of approaches and strategies. The WQIP Annual Report must include the number of PDPs/ACPs that are reviewed and approved within the fiscal year. The WQIP Annual Report is publicly available on the Project Clean Water website (MS4 Clearinghouse) (<https://www.projectcleanwater.org/>).

³ [The Water Quality Improvement Plan](#) sets forth activities that may occur within each RP's jurisdiction to satisfy permit requirements. RPs need comply only with permit conditions relating to discharges from the MS4s for which they are operators (40 Code of Federal Regulations [CFR] 122.26(a)(3)(vi)), " Order R9-2013-0001 at I.2, and each RP does not necessarily operate all portions of the MS4 within its jurisdiction.

1.2.1 Authority for Water Quality Credit Trading in San Diego

The RWQCB issued the Municipal Permit to the San Diego County Copermittees in May 2013. Under Provision E.3.c (1) of the Municipal Permit, all PDPs require the retention of “onsite the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event.” If retention is not feasible, then biofiltration best management practices (BMPs) may be implemented to control the amount of pollutants entering San Diego Bay and to improve the overall water quality. PDPs include both new development and redevelopment projects that create or replace a specific quantity of impervious surface for land uses that are defined under Provision E.3.b of the Municipal Permit.

Provision E.3.c (1) of the Municipal Permit also provides Copermittees with the option to pursue “alternative compliance” programs, rather than meeting the requirements within the PDP site. Developed credit trading systems must clearly demonstrate that discharges from ACPs will achieve a “greater overall water quality benefit”⁴ than meeting the onsite structural BMP requirements of Provisions E.3.c.(1)(a) and E.3.c.(1)(a)(i) of the Municipal Permit for the associated PDP.

In December 2015, the WQE Guidance Document was published to provide “standards and guidelines that determine whether an ACP will achieve a water quality benefit that is greater overall than a PDP.”⁵ In April 2018, the Draft Phase 2 WQE Guidance Document for Region 9 (Phase 2 WQE Guidance Document) was published to update the 2015 WQE Guidance Document⁶. The Phase 2 WQE Guidance Document is currently awaiting approval from the RWQCB.

The Authority’s BMP Design Manual for Permanent Site Design and Storm Water Treatment (BMP Design Manual), updated February 2016, addresses post-construction urban runoff pollution from new development and redevelopment projects, and outlines possible pathways for an alternative compliance program (Section 1.8) at SAN. The purpose of this document is to provide a framework for implementation of a water quality equivalency credit trading program.

1.2.2 Public Involvement

As required by Provision E.7 of the Municipal Permit, Sections IX.A.3.b and X.H.1.f of the Industrial Permit, and strategies outlined in the San Diego Bay WMA WQIP, the Authority conducts a comprehensive education and training program that measurably increases awareness of target populations with respect to the storm drain system, the impacts of urban runoff on receiving waters, and the BMPs (both structural and nonstructural) that are implemented to reduce storm water quality impacts to the maximum extent practicable (MEP).

⁴ San Diego Region (Municipal Permit), NPDES Order No. CAS0109266, as modified by Order Nos. 2015-0001 and 2015-0100

⁵ [WQE Guidance Document Region 9 December 2015](#)

WQE credit trading activities will be included in these public education activities. The Authority Stormwater Management Plan (SWMP) is available on the SAN public website (www.san.org).

2 Trading Basics

2.1 Types of Trades

The WQE Guidance Document addresses two types of ACPs that the Authority may implement:⁷

Applicant-Implemented ACPs: Projects initiated to offset specific PDP stormwater impacts that were not fully addressed onsite. In this scenario, an ACP is owned or constructed by the same party (in this case, the Authority) that is generating a PDP impact. Per the WQE Guidance Document, an “Applicant-Implemented ACP” does not require a credit system to track and trade associated impacts and benefits, unless the program generates excess credits. These excess credits may be banked (refer to Section 4.6 of this framework) for use by a future project implemented by the Authority.

Independent ACPs: Projects initiated independently of specific PDP impacts to provide water quality benefits or generate water quality credits for banking in a credit system. In this scenario, typically a party other than the PDP applicant owns or constructs an ACP. However, at SAN, all Independent ACPs will be onsite, under the Authority’s jurisdiction. Therefore, this framework will allow an ACP to be constructed within the jurisdiction without an associated PDP and the generated credits will be banked (refer to Section 4.6 of this framework) for use by a future project implemented by the Authority. This scenario is considered an “Independent ACP” per the WQE Guidance Document.

Refer to Figure 2.1 to determine which type of ACP is being implemented.

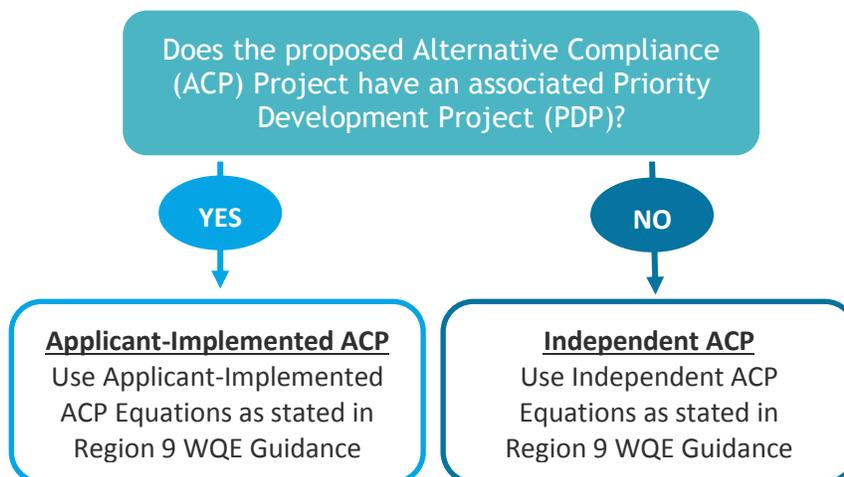


Figure 2.1. Types of Alternative Compliance Projects

⁷ [WQE Guidance Document Region 9 December 2015](#)

Most development projects at SAN are owned and constructed by the Authority and the Authority will be both the PDP owner and ACP owner, as well as the sole party to bank, track, and trade water quality credits. However, per Section 1.8 of the BMP Design Manual, the Authority may allow tenant-implemented alternative compliance projects. In this scenario, the applicant would be fully responsible for the ACP design, construction, operation, and long-term maintenance, and this framework would be updated to include tenants. The Authority will manage the tracking, banking, and trading of credits.

2.2 Trading Areas Within the Authority

The trading area for this framework is shown in Figure 2.2, which shows the 661 acres of the Authority's jurisdiction within the Pueblo HU of San Diego Bay WMA, where the trading program will be implemented.

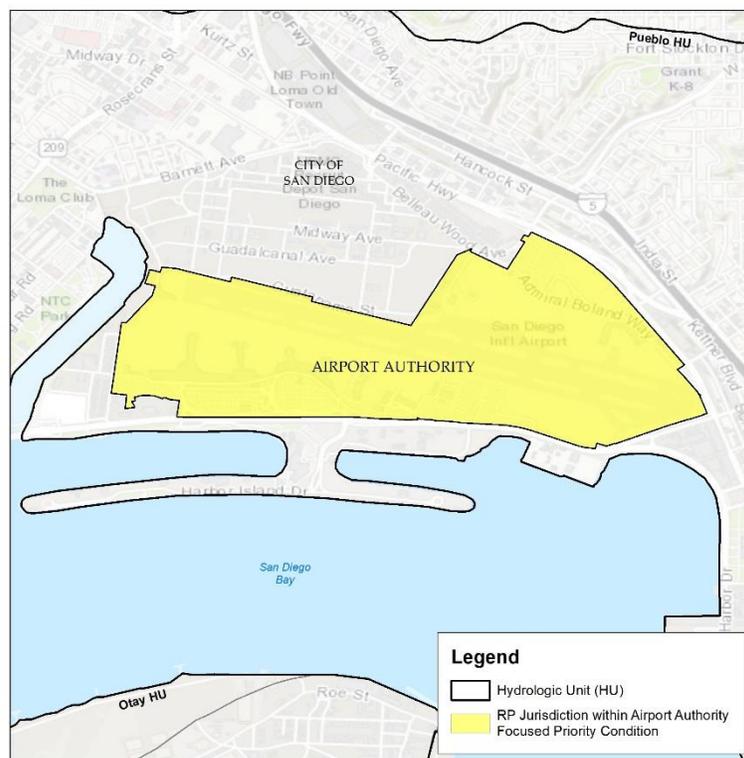


Figure 2.2. Authority's Jurisdiction Within the Pueblo HU of San Diego Bay WMA

2.3 Trade Eligibility

According to the WQE Guidance Document, the types of credits to be traded by the Authority are stormwater pollutant control credits (water quality credits). Because SAN is discharging to a waterbody exempt from a Hydromodification Management Plan (HMP) requirement,⁸ hydromodification flow control credits are not eligible for trade within this framework.

⁸ [Regional Watershed Management Area Analysis \(WMAA\)](#) names San Diego Bay exempt from hydromodification requirements.

3 Quantifying Water Quality Credits

The process for quantifying water quality credits has been approved by the RWQCB in the WQE Guidance Document. All water quality credits are to be calculated using the methodology set forth in the WQE Guidance Document, as well as current and future updates, and the BMP Design Manual:

- Current and future updates to the WQE Guidance Document will be posted on the Project Clean Water website:
<http://www.projectcleanwater.org/water-quality-equivalency-guidance/>
- Current and future updates to the BMP Design Manual will be posted on the Authority website:
<https://www.san.org/Airport-Projects/Environmental-Affairs#124539-stormwater>

3.1 Values for SAN Projects

Section 2 of the WQE Guidance Document provides WQE calculations and methodology options for stormwater pollutant control (water quality credits) that vary, depending on various site conditions. Figure 3.1 is taken from Section 2 of the WQE Guidance Document and depicts the three fundamental steps to determine whether the Municipal Permit standard of “greater overall water quality benefit” has been achieved. “Greater overall water quality benefit” is achieved when the earned stormwater pollutant control volume from the ACP is greater than or equal to the deficit of stormwater pollutant control volume from the PDP.

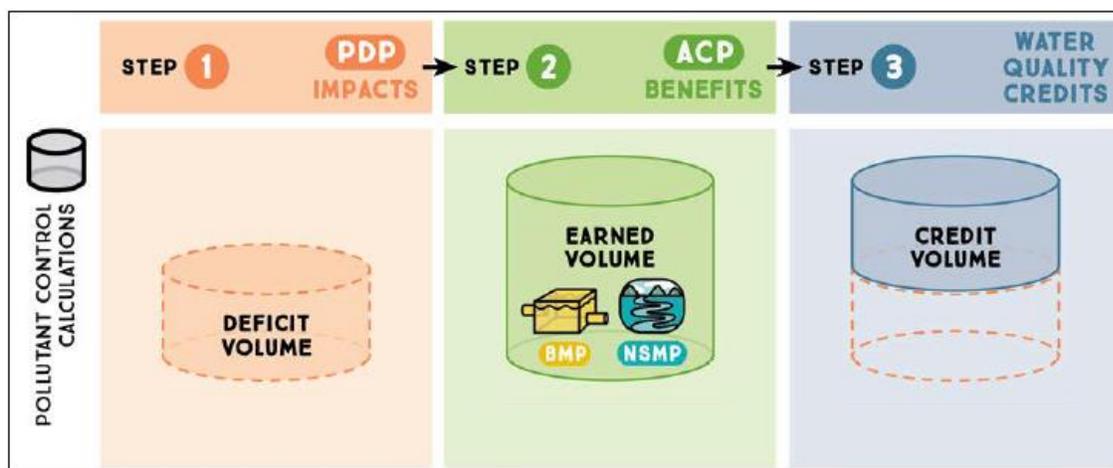


Figure 3.1. WQE Process for Stormwater Pollutant Control (WQE Guidance Document)

This framework provides default values to use at SAN when implementing the methodology in Section 2 of the WQE Guidance Document for determining WQE for stormwater pollutant control credits (water quality credits):

- 85th Percentile Storm – 0.5 inch of rainfall is the 85th percentile storm event for the Authority’s jurisdiction (see Figure B.1-1 of the BMP Design Manual).

- WMA and HU – SAN is located within the San Diego Bay WMA and the Pueblo HU.
- Land Use Category – SAN has only two land use categories: Industrial and Transportation.
- Independent ACP Reference Tributary Land Use Composition Value – Task 2-2c, *Reference Tributary Area Calculations*, of the WQE Guidance Document states that the applicable WMA or HU is to be used as the reference tributary. However, per this framework, projects are occurring only within the SAN jurisdiction and should be compared only to the land use within the jurisdiction. Rather than using the Land Use Compilation values associated with the San Diego Bay WMA in the Pueblo HU, the applicant must assume the entire SAN jurisdiction of 661 acres and split the land use between the Industrial and Transportation categories. Land use acreage will be updated as needed for changes due to construction of future projects.

4 Water Quality Credit Basics

4.1 Water Quality Credit and Deficit Units

Design capture volume (DCV) calculations required in the BMP Design Manual and the WQE calculations required in the WQE Guidance Document are two separate sets of calculations that determine the units for stormwater pollutant credits.

Positive volumes are considered credits and negative volumes are considered deficits. A credit (positive volume) is associated with an ACP that has generated the volume (or more) required by the Municipal Permit. A deficit (negative volume) is associated with a PDP that has not generated the DCV required by the Municipal Permit.

4.2 Eligibility Criteria for Credits and Deficits

Under this framework, any proposed BMP in conjunction with an ACP is eligible to generate water quality credits. A PDP with a deficit can use credits generated from an ACP, if the PDP project has provided flow-through mitigation for the DCV not reliably retained onsite, for which the credits will be used as mitigation to offset the deficit (see Section 1.8 of the BMP Design Manual).

The credit and deficit amount provided by an ACP and PDP is calculated during the design phase of the project, according to the method described in the WQE Guidance Document. However, ACP credits are not eligible to offset a PDP until the ACP has been implemented and verified, per Section 7 of this framework. If a PDP project is implemented prior to the ACP, the PDP must provide temporary stormwater pollutant control until the ACP is implemented and verified, per Section 6 of this framework (Section 1.8 of the BMP Design Manual).

During the construction of ACPs, credits may be released in phases, depending on when the associated BMPs are fully installed and functioning.

4.3 Credit and Deficit Status

Credits are considered to be assigned after they have been applied toward a PDP deficit. Any changes and/or alterations in implemented BMPs will result in a review of generated credits. For purposes of credit tracking, the status of credits will be defined and documented per Table 4.1. Credits can only have one status at a time. All activities and status changes will be tracked in a database managed by the Authority.

Table 4.1. Credit Status Definitions

Credit Status	Description
 Pending	Once a project is approved for construction, the associated credits and deficits are pending, per Section 6 of this framework. Deficits will be pending until an active credit has been assigned, at which point the credit will cancel out the deficit.
 Active	Upon verification, pending or suspended credits that have not yet been assigned are considered active, per Section 7 of this framework.
 Assigned	Credits from an ACP are considered assigned once they have been applied to a deficit (PDP) and can longer be applied to another deficit (PDP).
 Suspended	<ol style="list-style-type: none"> Active and assigned credits are considered suspended if/when an annual ongoing project verification report or annual inspection identifies a failure to meet approved practice standards or other requirements of an approved Stormwater Quality Management Plan (SWQMP), as described in Section 7 of this framework (e.g., when a BMP is not verified or not maintained), or If the Municipal Permit is updated to change BMP requirements for development projects, pending and active credits must be evaluated for validity under new permits and are suspended until verified or retired.
 Retired	<ol style="list-style-type: none"> Active credits are considered retired at the end of the project life (when a BMP is removed or no longer functional) or When corrective actions taken in response to enforcement fail to return suspended credits to active status, or If the Municipal Permit is updated to change BMP requirements for development projects and pending and/or active credits are deemed invalid under the new Municipal Permit, they would no longer meet the criteria for credit life outlined in Section 4.4 of this framework and would be considered retired.

4.4 Credit Life

“Credit life” is defined as the period during which a water quality credit may be used to offset a deficit.

Credits will be eligible for “credit life” under this framework if the following criteria are met:

- 1) The credits were calculated in a manner consistent with the current Municipal Permit and associated guidance documents.
- 2) The credit-generating BMP is maintained per the Operation and Maintenance (O&M) Plan in the associated Stormwater Quality Management Plan (SWQMP), as verified during inspections by the Authority.
- 3) The credit-generating BMP is functioning in the capacity originally intended, as verified during inspections by the Authority.

To assist with compliance of the Municipal Permit, the BMP Design Manual requires annual inspections of all BMPs. Credits may remain active if they continue to meet the criteria in this section and the BMP maintenance and function are verified annually during inspections by the Authority. Failure to maintain a credit-generating BMP from which credits have been assigned will result in continuous escalating enforcement until the issues are resolved.

4.5 Project Life

“Project life” is defined as the period during which an ACP is anticipated to generate usable water quality credits. The life of an ACP often spans several years. For the purposes of this framework, project life can vary, based on the specific nature of the project, the project site, and the expected life of the specific BMP when maintained regularly. Project life will be specified in each approved SWQMP and will be based on industry-standard maintenance requirements for the specific BMP.

Under this framework, once an ACP reaches the end of its specified project life, any active credits will be considered retired and will no longer be active. However, in cases in which the ACP can be upgraded to continue to function in the capacity originally intended, the credits may remain active.

4.6 Banking Credits

“Banking” is the generation of a water quality credit with the intention that it be used to offset a future PDP’s deficit. Under this framework, banking of credits is allowed if the requirements of credit life under Section 4.4 are met. For purposes of this provision, credit-generating actions must take place before construction is complete on the PDP they are used to offset. In other words, only active credits can be banked.

5 Credit Verification and Tracking

5.1 Credit Verification

Per Section 8 of the BMP Design Manual, it is necessary for the Authority Planning and Environmental Affairs Department (P&EAD) to review project plans for compliance with

applicable requirements of the BMP Design Manual and Municipal Permit. Per this framework, the Authority will also verify credits before credits can become active and available for assignment, following directives specified in the BMP Design Manual, WQE Guidance Document, and Sections 6 and 7 of this framework.

To meet the current MS4 requirements for water quality equivalency credit trading, it is important for the Authority to track credits through the various stages of their life cycle (i.e., pending, active, assigned, suspended, and retired). The Authority is the RP for tracking credit-generating projects and status through management of the Authority’s database. **Error! Reference source not found.** shows the process through which credits move through the different statuses defined in Section 4.3 of this Framework.

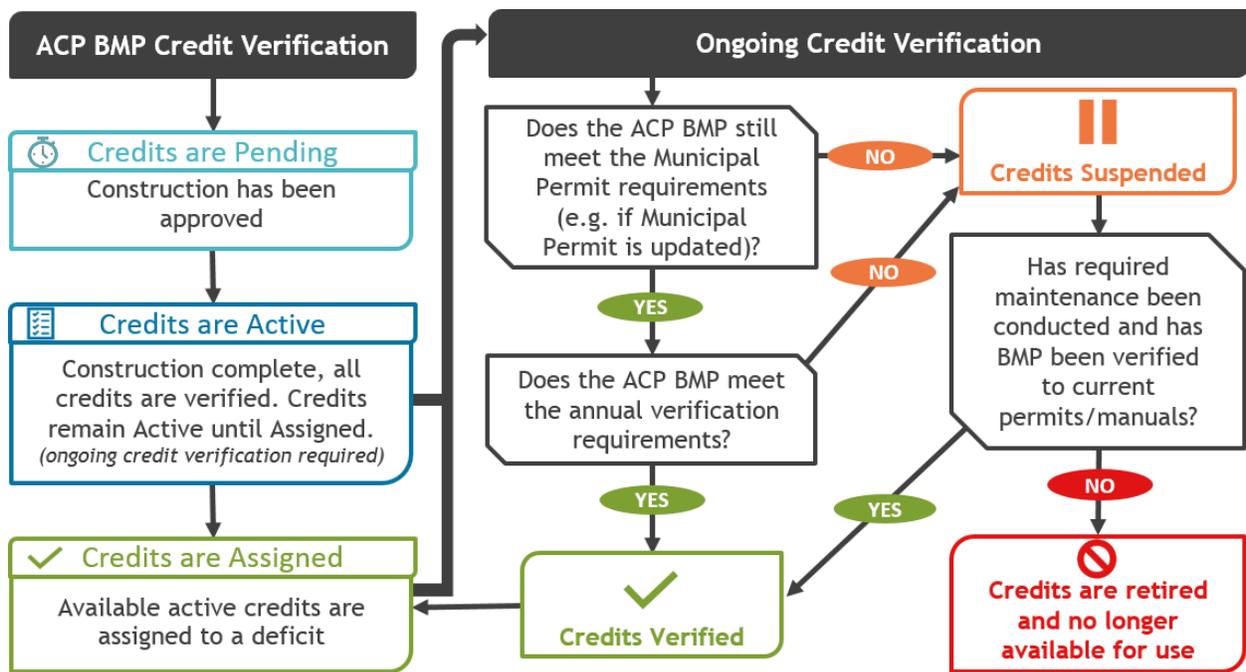


Figure 5.1 Alternative Compliance Credit Verification Process

5.2 Credit Tracking and Registry Administration

The Authority maintains a database to track and record sampling and monitoring efforts, inspections, audits, Stormwater Pollution Prevention Plans (SWPPPs), SWQMPs, and hotline issues, and to communicate with tenants and Authority employees regarding stormwater issues.

The database interface will track and monitor the application of ACP-generated credits and PDP deficits through reporting information in Table 5.1.

Table 5.1. Example Credit Tracking and Monitoring

Credit Tracking	
Credit Generating Project Name (ACP)	Example ACP 1
Project Location	lat/long
Implemented BMP Type	Retention/Bioretenion/Flow-Through
Available Credit (Volume)	ft ³
Current Credit Status	Pending/Active
Pending or Active Credit Date	XX/XX/XXXX
Status Change	Assigned/Suspended/Retired
Status Change Date	XX/XX/XXXX
Total Credits Used (detailed below)	ft ³
Total Remaining Credits	ft ³
Project Deficit Name (PDP) 1	Example PDP 1
Project Location	lat/long
PDP Deficit (Volume)	ft ³
Assigned Credit Date	XX/XX/XXXX
Project Deficit Name (PDP) 2	Example PDP 2
Project Location	lat/long
PDP Deficit (Volume)	ft ³
Assigned Credit Date	XX/XX/XXXX

ACP = Alternative Compliance Project; BMP = best management practice; ft³ = cubic feet;
lat/long = latitude/longitude; PDP = Priority Development Project

This information will be maintained in the Authority’s database for all ACPs and can be made available to regulatory agencies upon request.

6 Project Approval

6.1 Applicant-Implemented ACP

The applicant must prepare a SWQMP, including Construction Plans, for the PDP, per Section 8.2 of the BMP Design Manual. The calculation of credits generated by the ACP and a detailed discussion of the ACP should be described in an Appendix to the PDP SWQMP template that is included in Appendix A.4 of the BMP Design Manual. The PDP SWQMP is to be reviewed and approved by the Authority. The P&EAD will be the primary department at SAN for accepting and approving SWQMPs.

The final version of the SWQMPs are to be retained by the Authority and uploaded to the Authority's web-based database for Municipal Permit compliance tracking. Approvals of these plans certify that the credits associated with the ACP and applied to the PDP are calculated per the BMP Design Manual, WQE Guidance Document, and this framework, and therefore comply with current Municipal Permit requirements. The Authority requires that the SWQMP be certified by an architect, landscape architect, or civil engineer licensed to practice in the State of California per the BMP Design Manual requirements.

The information to be tracked by the Authority includes the deficit volume of the PDP and the credit volume of the ACP. These credits and deficits will be assigned as "pending" in the Authority's database.

6.2 Independent ACP

The applicant must prepare a SWQMP, including Construction Plans and credits earned, for the ACP for review and approval by the Authority. The SWQMP template included in Appendix A.4 of the BMP Design Manual must be modified to include a detailed discussion of the ACP and the associated calculation of credits. The SWQMP is to be reviewed and approved by the Authority. The P&EAD will be the primary department at SAN for accepting and approving SWQMPs. Per the BMP Design Manual, the Authority requires that the SWQMP be certified by an architect, landscape architect, or civil engineer licensed to practice in the State of California.

The final version of the SWQMP is to be retained by the Authority and uploaded to the database. Approval of the plan certifies that the credits associated with the ACP are calculated per the BMP Design Manual, WQE Guidance Document, and this framework, and therefore comply with P&EAD and current Municipal Permit requirements.

The information to be tracked by the Authority is the credit volume produced by the ACP. These credits will be assigned as "pending" in the Authority's database.

7 Project Implementation and Verification

Once a SWQMP has been approved via the process described in Section 6, the subject ACP must be successfully implemented, and the BMP verified before any "pending" water quality credits may be "active" and "assigned." Sections 7.1 through 7.3 describe requirements for project implementation, project verification, and ongoing project verification of maintenance and functionality of implemented BMPs.

7.1 Project Implementation

The proposed BMP(s) must be implemented per the approved SWQMP and associated construction drawings and specifications. Per Section 8.2.3 of the BMP Design Manual, any changes during construction that affect the design of the BMP(s) must be reviewed and approved by the P&EAD before work can proceed.

7.2 Project Verification

Project verification will be pursuant to Provision E.3.e.(1) of the Municipal Permit and Section 8.2.3 of the BMP Design Manual.

Upon completion of project implementation, the P&EAD and the project proponent engineer “will inspect each structural BMP to verify that it has been constructed in compliance with all specifications, plans, permits, and ordinances.” Verification of the structural BMP will be recorded in the Authority’s web-based database.

Prior to inspection, the P&EAD may require the as-built construction plans and the SWQMP, including any revisions that were approved during construction. The as-builts and SWQMP represent the post-construction conditions and may differ from the original approved plans and SWQMP. The as-built plans and SWQMP, including the Final O&M Plan, will be uploaded to the Authority’s database. Once this process is complete, the “pending” status of the water quality credits will be changed to “active” in the Authority’s database.

7.3 Ongoing Project Verification

Per Section 7.5 of the BMP Design Manual, the minimum inspection and maintenance frequency (and reporting frequency) is annual, although actual maintenance needs are site and BMP specific and may need to be performed more frequently.

Ongoing project verification is the process of periodically reviewing and confirming that the ACP:

- (1) Continues to be maintained in conformance with its approved O&M Plan in the approved SWQMP;
- (2) Continues to meet all relevant framework criteria; and
- (3) Generates credits that have been (and continue to be) estimated accurately per the appropriate methods and procedures.

The credits can remain “active” or “assigned” in the online database once this verification process is complete. If any issues are encountered during the verification process, the credits should be labeled as “suspended” until the issues are resolved per Table 4.1.

8 Adaptive Management

8.1 Improving Framework Specifications, Protocols, and Processes

This framework must be updated and/or amended if/when:

- The Authority changes its trading policy to include other parties.
- There are revisions in the renewed Municipal Permit and/or the associated documents, the WQE Guidance Document, or the BMP Design Manual.⁹

⁹ San Diego County Regional Airport Authority BMP Design Manual for Permanent Site Design and Storm Water Treatment, February 2016.

- Based on lessons learned, changes and improvements necessary to the provisions of this framework require a formal revision. Such a revision would be subject to standard requirements for review and RWQCB approval.

9 References

The following references provide the basis for water quality credit trading, and were used in the development of this document:

- United States Environmental Protection Agency (USEPA) Water Quality Trading Policy, January 13, 2003 (2003 USEPA Trading Policy).
- *Building a Water Quality Trading Program: Options and Considerations*; a product of the National Network on Water Quality Trading, June 2015. (also known as [a.k.a.] National Network's Options and Considerations document).
- *The Water Quality Trading Toolkit*; created by the Association of Clean Water Administrators (ACWA) and Willamette Partnership, August 2016. (a.k.a. ACWA Trading Framework Template).
- *California Regional Water Quality Control Board, San Diego Region Waste Discharge Requirements for Discharges of Urban Runoff from the MS4s Draining the Watersheds Within the San Diego Region (Municipal Permit), NPDES No. CAS0109266, as modified by Order Nos. 2015-0001 and 2015-0100.*
- *County of San Diego BMP Design Manual*; guidance for land development and public improvement projects to comply with the 2013 MS4 Permit, Order No. R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100), February 2016.
- *Water Quality Equivalency Guidance Document for Region 9*; technical report prepared under the California Regional Water Quality Control Board, San Diego Region (RWQCB) Municipal Separate Storm Sewer System Permit, Order No. R9-2013-0001 National Pollutant Discharge Elimination System (NPDES) No. CAS0109266, December 2015.
- *Draft Phase 2 Water Quality Equivalency Guidance Document for Region 9*; technical report prepared under the California Regional Water Quality Control Board, San Diego Region Municipal Permit: Order No. R9-2013-0001 NPDES No. CAS0109266, April 2018 (pending approval by the RWQCB).